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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/763,461	
	Filing Date	January 23, 2004	
	First Named Inventor	Shchukin et al.	
	Art Unit	2811	
	Examiner Name		
Total Number of Pages in This Submission	7	Attorney Docket Number	QIL-1CDV

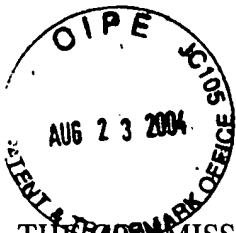
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<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

THE COMMISSIONER OF PATENTS AND TRADEMARKS
Alexandria VA 22313-140

In re the application of: Shchukin et al.
For: Defect-Free Semiconductor Templates for Epitaxial Growth
Filed: January 23, 2004
Application No.: 10/763,461
Art Unit: 2811
Attorney Docket No.: QIL-1CDV

INFORMATION DISCLOSURE STATEMENT

List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this information Disclosure Statement

1. ☒ Preliminary Statements
2. ☒ FORM PTO - 1449 (Modified)
3. ☐ Statement As To Information Material To Examination Not Found in Patents or Publications
4. ☐ Identification of Prior Application In Which Listed Information Was Already Cited and For Which No Copies Are Submitted Or Need Be Submitted.
5. ☐ Cumulative patents or Publications
6. ☒ Copies of Listed Information Items Accompanying This Statement
7. ☐ Concise Explanation of Non-English Language Listed Information Items.
8. ☐ Translation(s) of Non-English Language Documents
9. ☐ Certification under MPEP 609(e)
10. ☒ Identification of Person(s) Making This Information Disclosure Statement

CERTIFICATE OF MAILING

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Date: August 19, 2004

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Justin Wood

Section 1. Preliminary statements

Applicant submits herewith patents, publications or other information of which he is aware, which he believes may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR 1.56.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 CFR 1.56(g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

Section 2. Form PTO - 1449 (Modified) (SEE ATTACHMENT)

*EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw a line through citation if not in conformance or not considered. Include a copy of this form with the next communication to applicant.

Section 3. Statement As To Information Material For Examination Not Found in Patents or Publications (Information not listed in PTO 1449)

Section 4. Identification of Prior Application in Which Listed Information Was Already Cited and For Which No Copies Are Submitted Or Need Be Submitted

Section 5. Cumulative Patents or Publications

☐ Item(s)

are cumulative of the following patents or publication listed on Form PTO 1449 (modified):

In accordance with 37 CFR 1.98(c) a copy of _____ is being submitted with this information disclosure statement:

Section 6. Copies of Listed Information Items Accompanying This Statement

Legible copies of all items listed accompany this information statement.

☐ Exception(s) to above:

☐ Items in prior application from which an earlier filing date is claimed for this application as identified in Section 4.

☐ Cumulative patents or publications identified in Section 5.

Section 7. Concise Explanation of Non-English Language Listed Information Items

Section 8. Translation(s) of Non-English Language Documents

☐ Submitted herewith is an English translation of the following foreign language patents, publications or information or of those portions of those patents, publications or information considered to be material:

☐ No English language translations of the foreign language patents, publications or information or parts thereof are readily available, except for those listed above.

☐ The following foreign language documents submitted are believed to be the equivalent or

substantial equivalent of the English language documents identified below, which are also submitted herewith.

Section 9. Certification under Rule 1.97

☐ The undersigned hereby certifies that:

a. This Statement is being filed after the latest of (1) three months after the filing date of a national application; (2) three months after the date of entry of the national stage as set forth in w 1.491 in an international application; (3) the mailing date of a first Office action on the merits.

b. The fee set forth in §1.17(p)

☐ Is being paid with this Information Disclosure Statement

☐ Is not due because:

☐ (1) Each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the statement, or

☐ (2) No item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the statement.

Section 10. IDENTIFICATION OF PERSON(S) MAKING THIS INFORMATION DISCLOSURE STATEMENT

The person making this statement is

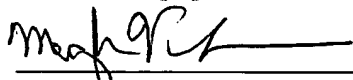
(a) ☐ the inventor(s) who signs below

(b) ☒ the attorney who signs below on the basis of:

☐ the information supplied by the inventor(s)

☐ an individual associated with the filing and prosecution of this application (37 CFR 1.56(c)).

☒ the information in the attorney's file



Meghan Van Leeuwen, Registration No. 45,612

BROWN & MICHAELS, PC

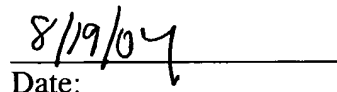
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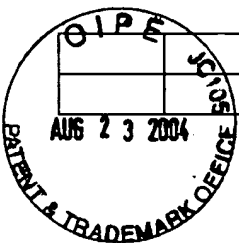
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2002/0046693	04/25/02	Kiyoku et al.	117	8	
2003/0037722	02/27/03	Kiyoku et al.	117	84	

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

Exam Initial	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB	TRANSLATION YES NO

OTHER PRIOR ART

Exam Initial	Author, Title, Date, Pertinent Pages, Etc
	J.L. Liu, C.D. Moore, G.D. U'Ren, Y.H. Luo, Y. Lu, G. Lin, S.G. Thomas, M.S. Goorsky, K.L. Wang; "A surfactant-mediated relaxed $\text{Si}_{0.5}\text{Ge}_{0.5}$ graded layer with a very low threading dislocation density and smooth surface", <i>Applied Physics Letters</i> , Vol. 75 (11), pp. 1586-1588 (1999).
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	"Vertical-Cavity Surface-Emitting Lasers: Design, Fabrication, Characterization, and Applications"; by C.W. Wilmsen, H. Temkin, L.A. Coldren (editors), Cambridge University Press, 1999
	N.N. Ledentsov, V.A. Shchukin; "Novel Concepts for Injection Lasers", <i>Optical Engineering</i> , Vol. 41 (12), pp. 3193-3203 (2002).
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EXAMINER	DATE CONSIDERED

Section 2. Form PTO - 1449 (Modified) (ATTACHMENT)

FORM PTO-1449 U.S. DEPT. OF COMMERCE (Modified) PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO. QIL-1CDV	SERIAL NO. 10/763,461
	APPLICANT Shchukin et al.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE 1/23/04	GROUP 2811



U.S. PATENT DOCUMENTS

Exam Initial	DOCUMENT NUMBER	DATE	PATENTEE	CLASS	SUB	FILING DATE IF APPROPR
	4,806,996	02/21/89	Luryi, S.	357	16	
	5,019,874	05/28/91	Inoue et al	357	16	
	5,075,744	12/24/91	Tsui, R.K.	357	22	
	5,091,767	02/25/92	Bean et al	357	60	
	5,156,995	10/20/92	Fitzgerald Jr., et al	437	90	
	5,208,182	05/04/93	Narayan et al	437	110	
	5,210,051	05/11/93	Carter Jr.	437	107	
	5,290,393	03/01/94	Nakamura	156	613	
	5,306,662	04/26/94	Nakamura et al .	437	107	
	5,482,890	01/09/96	Liu et al.	437	107	
	5,719,894	02/17/98	Jewell et al	372	45	
	5,741,724	04/21/98	Ramdani et al.	437	182	
	5,838,029	11/17/98	Shakuda	257	190	
	5,859,864	01/12/99	Jewell, J.	372	45	
	5,888,885	03/30/99	Xie	438	493	
	5,927,995	07/27/99	Chen et al	438	517	
	5,928,421	07/27/99	Yuri et al.	117	97	
	5,960,018	09/28/99	Jewell et al	372	45	
	5,972,801	10/26/99	Lipken et al.	438	770	
	6,087,681	07/11/00	Shakuda	257	103	
	6,153,010	11/28/00	Kiyoku et al.	117	95	
	6,160,833	12/12/00	Floyd et al.	372	96	
	6,177,688	01/23/01	Linthicum	257	77	
	6,194,742	02/27/01	Kern et al.	257	94	
	6,287,947	09/11/01	Ludowise et al.	438	606	
	6,498,111	12/24/02	Kapolnek et al.	438	762	
	6,534,797	03/18/03	Edmond et al.	257	97	
	6,537,513	03/25/03	Amano et al.	423	328.2	
	6,582,986	06/24/03	Kong et al.	438	48	
	6,602,763	08/05/03	Davis et al.	438	481	
	6,627,520	09/30/03	Kozaki et al.	438	479	
	6,627,974	09/30/03	Kozaki et al.	257	623	
	6,630,691	10/07/03	Mueller-Mach et al.	257	84	
	6,630,692	10/7/03	Goetz et al.	257	94	
	2003/0160232	08/28/03	Kozaki et al.	257	22	